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EXAMINER	
LY, NGHI H	

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/915,736	ATTAR ET AL.	
	Examiner	Art Unit	
	Nghi H. Ly	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-98* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,16-24 and 27-98* is/are rejected.

7)☒ Claim(s) *10-15,25 and 26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-7, 9, 16-22, 24, 27-38, 40-52, 56-72, 74-86, and 90-98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohani (US 5,999,522) in view of Dufour (US 5,613,205).

Regarding claims 1, 16 and 31, Rohani teaches a method for directing communication between a subscriber station and a plurality of sectors in a data communication system (see fig.2), comprising: determining a forward link quality metric for each sector in the subscriber station's list (column 2, lines 56-61, see "determining"),

determining a quality related to a reverse link quality metric for each sector in the subscriber station's list (column 5, lines 35-44, see "determining"), and directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with the determined forward link quality metrics and the determined qualities related to a reverse link quality metric (see column 4, lines 21-41 and Abstract).

Rohani does not specifically disclose determining at the subscriber station a forward link quality metric for each sector in the subscriber station's list, determining at the subscriber station a quality related to a reverse link quality metric for each sector in the subscriber station's list.

Dufour teaches determining at the subscriber station a forward link quality metric for each sector in the subscriber station's list (see column 6, lines 12-28), determining at the subscriber station a quality related to a reverse link quality metric for each sector in the subscriber station's list (also see column 6, lines 12-28).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Dufour into the system of Rohani in order to provide a system and method of locating a mobile terminal within the service area of a cellular telecommunication system (see Dufour, column 1, lines 10-15).

Regarding claims 2 and 17, Rohani further teach the data communication system comprises: a wireless data communication system (seefig.2 wireless connection between 200 and 290).

Regarding claim 3, Rohani further teaches determining at the remote station a quality metric of a forward link for each sector in the remote station's list comprises: measuring a signal-to-noise-and-interference-ratio of the forward link (see Abstract and column 1, lines 45-49, Rohani inherently teaches this claimed limitation since Rohani teaches measuring a signal strength of forward and reverse links).

Regarding claim 4, Rohani further teaches measuring a signal-to-noise-and-interference-ratio of the forward link comprises measuring a signal-to-noise-and-interference-ratio of a pilot signal on the forward link (see Abstract and column 1, lines 45-49, Rohani inherently teaches this claimed limitation since Rohani teaches measuring a signal strength of forward and reverse links).

Regarding claim 5, Rohani further teaches measuring a signal-to-noise-and-interference-ratio of a pilot signal on the forward link comprises measuring a signal-to-noise-and-interference-ratio of a non-continuous pilot signal on the forward link (see Abstract and column 1, lines 45-49, Rohani inherently teaches this claimed limitation since Rohani teaches measuring a signal strength of forward and reverse links).

Regarding claims 6 and 7, Rohani teaches determining a quality related to a reverse link quality metric for each sector in the subscriber station's list comprises: ascertaining at the subscriber station a first signal value at a position in a first channel of the forward link for each sector in the subscriber station's list, and processing at the subscriber station the ascertained first signal value for the each sector in the subscriber station's list (see Abstract).

Regarding claims 9 and 24, Rohani teaches directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with the determined forward link quality metrics and the determined qualities related to a reverse link quality metric comprises: assigning credits to each sector in the subscriber station's list except a current serving sector in accordance with the determined forward link quality metrics and the determined qualities related to a reverse link quality metric, and directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with the assigned credits (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 18, Rohani teaches the processor is configured to determine at the subscriber station a quality metric of a forward link for each sector in the subscriber station's list by executing a set of instructions to measure a signal-to-noise-and-interference-ratio of the forward link (see Abstract and column 1, lines 45-49, Rohani inherently teaches this claimed limitation since Rohani teaches measuring a signal strength of forward and reverse links).

Regarding claim 19, Rohani teaches the processor is configured to measure a signal-to-noise-and-interference-ratio of the forward link by executing a set of instructions to measure a signal-to-noise-and-interference-ratio of a pilot signal on the forward link (see Abstract and column 1, lines 45-49, Rohani inherently teaches this claimed limitation since Rohani teaches measuring a signal strength of forward and reverse links).

Regarding claim 20, Rohani teaches the processor is configured to measure a

signal-to-noise-and-interference-ratio of a pilot signal on the forward link by executing a set of instructions to measure a signal-to-noise-and-interference-ratio of a non-continuous pilot signal on the forward link (see Abstract and column 1, lines 45-49, Rohani inherently teaches this claimed limitation since Rohani teaches measuring a signal strength of forward and reverse links).

Regarding claims 21 and 22, Rohani teaches the processor is configured to determine a quality related to a reverse link quality metric for each sector in the subscriber station's list by executing a set of instructions to: ascertain at the subscriber station a first signal value at a position in a first channel of the forward link for each sector in the subscriber station's list, and process at the subscriber station the ascertained first signal value for the each sector in the subscriber station's list (see Abstract).

Regarding claim 27, Rohani teaches the processor is configured to direct communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with the assigned credits by executing a set of instructions to: determine sectors with the assigned credits greater than a third threshold, and direct communication to a sector from the determined sectors with the highest of the assigned credits (see column 3, lines 1-22 and column 4, lines 21-41).

Regarding claims 28 and 29, Rohani teaches the set of instructions executable by the processor to further comprises a set of instructions to direct communication to a sector from the determined sectors with the highest processed signal value when at

least two of the determined sectors have equal highest assigned credits (see column 4, lines 30-34 and column 4, line 61 to column 5, line 23).

Regarding claim 30, Rohani teaches the set of instructions executable by a processor to further comprises a set of instructions to remain in communication with the current serving sector otherwise (see column 2, lines 46-50 and column 4, lines 7-10).

Regarding claims 32, 65 and 66, Rohani teaches a method for directing communication between a subscriber station and a plurality of sectors in a data communication system (see fig.1), comprising: determining a forward link quality metric for each sector in the subscriber station's list (column 2, lines 56-61 and column 5, lines 35-44, see "determining"), determining a forward link de-rating value for at least one sector in the subscriber station's list (see column 2, lines 56-61 or Abstract),

assigning credits to each sector in the subscriber station's list except the sector currently serving the subscriber station in accordance with the forward link quality metric and the forward link de-rating value (column 4, lines 31-34, see "candidate list", the teaching of Rohani indeed teaches Applicant's "assigning credits" and "de-rating"),

and directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with the determined forward links quality metrics and the at least one determined forward link de-rating value (see column 3, lines 1-22 or Abstract).

Rohani does not specifically disclose determining at the subscriber station a forward link quality metric for each sector in the subscriber station's list.

Dufour teaches determining determining at the subscriber station a forward link quality metric for each sector in the subscriber station's list (see column 6, lines 12-28).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Dufour into the system of Rohani in order to provide a system and method of locating a mobile terminal within the service area of a cellular telecommunication system (see Dufour, column 1, lines 10-15).

Regarding claims 33, 35 and 67, Rohani further teach the data communication system comprises: a wireless data communication system (seefig.2 wireless connection between 200 and 290).

Regarding claim 34, Rohani teaches determining at the subscriber station a quality metric of a forward link for each sector in the subscriber station's list comprises measuring a signal-to-noise-and-interference-ratio of the forward link (see Abstract and column 1, lines 45-49, Rohani inherently teaches this claimed limitation since Rohani teaches measuring a signal strength of forward and reverse links).

Regarding claim 36, Rohani teaches measuring a signal-to-noise-and-interference-ratio of a pilot signal on the forward link comprises measuring a signal-to-noise-and-interference-ratio of a non-continuous pilot signal on the forward link (see Abstract and column 1, lines 45-49, Rohani inherently teaches this claimed limitation since Rohani teaches measuring a signal strength of forward and reverse links).

Regarding claim 37, Rohani teaches determining a forward link de-rating value of at least one sector in the subscriber station's list comprises: ascertaining at the

subscriber station a first signal value at a position in a first channel of the forward link for the at least one sector in the subscriber station's list; processing at the subscriber station the ascertained first signal value for the at least one sector in the subscriber station's list; and determining at the subscriber station the forward link de-rating value in accordance with the processed first signal value for the at least one sector in the subscriber station's list (see column 4, lines 21-41 and Abstract).

Regarding claim 38, Rohani teaches ascertaining at the subscriber station a first signal value at a position in a first channel of the forward link for the at least one sector in the subscriber station's list comprises ascertaining at the subscriber station a reverse power control bit at a reverse power control channel of the forward link for the at least one sector in the subscriber station's list (see column 2, lines 56-61 or Abstract).

Regarding claim 40, Rohani teaches determining at the subscriber station the forward link de-rating value in accordance with the processed first signal value for each sector in the subscriber station's list comprises determining at the subscriber station the forward link de-rating value in accordance with a pre-determined relationship between the processed first signal value and the forward link de-rating value (see column 2, lines 56-61, column 4, lines 21-41 and Abstract).

Regarding claim 41, Rohani teaches determining at the subscriber station a first reverse link quality metric in accordance with a pre-determined relationship between the processed first signal value and the first reverse link quality metric, and determining at the subscriber station the forward link de-rating value in accordance with a pre-determined relationship between the first reverse link quality metric and the forward link

de-rating value Rohani (see column 2, lines 56-61, column 4, lines 21-41 and Abstract).

Regarding claim 42, 56, 76 and 90, Rohani teaches de-rating the determined forward link quality metric in accordance with the determined forward link de-rating value, assigning credits to each sector in the subscriber station's list except the sector currently serving the subscriber station in accordance with the de-rated forward link quality metric (see column 4, lines 31-34, the teaching of Rohani indeed teaches Applicant's "assigning credits" and "de-rating"), and directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with the assigned credits (see column 2, lines 56-61, column 4, lines 21-41 and Abstract).

Regarding claim 43, Rohani teaches decreasing credits of a sector by a first value if the de-rated forward link quality metric of the sector is greater than the de-rated forward link quality metric for a sector currently serving the subscriber station modified by a first threshold, and increasing credits of a sector by a second value otherwise (see column 5, lines 1-23, column 4, lines 21-41 and Abstract).

Regarding claim 44, Rohani teaches determining sectors with the assigned credits greater than a second threshold, and directing communication to a sector from the determined sectors with the highest of the assigned credits if a time interval elapsed from the last redirection of communication (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 45, Rohani teaches directing communication to a sector from the determined sectors with the highest processed signal value when at least two of the

determined sectors have equal highest assigned credits (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 46, Rohani teaches directing communication to a sector from the determined sectors with the highest forward link quality metric when at least two of the determined sectors have equal highest assigned credits (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 47, Rohani teaches ascertaining sectors with the assigned credits greater than a third threshold (see column 5, lines 1-23), and directing communication to a sector from the ascertained sectors with the highest of the assigned credits if a time interval failed to elapse from the last re-pointing (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 48, Rohani teaches directing communication to a sector from the determined sectors with the highest processed signal value when at least two of the determined sectors have equal highest assigned credits (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 49, Rohani teaches directing communication to a sector from the determined sectors with the highest forward link quality metric when at least two of the determined sectors have equal highest assigned credits (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claims 50 and 84, Rohani teaches the set of instructions executable by a processor to further comprises a set of instructions to remain in communication with the current serving sector otherwise (see column 2, lines 46-50 and column 4, lines

7-10).

Regarding claim 51, Rohani teaches a second reverse link quality metric of a current serving sector in the subscriber station's list, and wherein the directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with the determined forward links quality metrics and the determined forward link de-rating value comprises directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with the determined forward links quality metrics, the determined second reverse link quality metric, and the determined forward link de-rating value (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 52, Rohani teaches ascertaining a second signal value in a second channel of the forward link of the current serving sector in the subscriber station's list, and determining the second reverse link quality metric in accordance with the ascertained second signal value for the current serving sector in the subscriber station's list (see column 2, lines 56-61, column 4, lines 21-41 and Abstract).

Regarding claim 57, Rohani teaches decreasing credits of a sector by a first value if the de-rated forward link quality metric of the sector is greater than the de-rated forward link quality metric for a sector currently serving the subscriber station modified by a first threshold, and increasing credits of a sector by a second value otherwise (see column 2, lines 56-61, column 4, lines 21-41, column 5, lines 1-23 and Abstract).

Regarding claim 58, Rohani teaches directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in

accordance with the assigned credits and the determined second reverse link quality metric comprises continuing communication with the current serving sector if the determined second reverse link quality metric is sufficient (see column 2, lines 46-50, column 4, lines 7-10, column 5, lines 1-23 and Abstract).

Regarding claim 59, Rohani teaches determining sectors with the assigned credits greater than a second threshold, and directing communication to a sector from the determined sectors with the highest of the assigned credits if the determined second reverse link quality metric is insufficient (see Abstract, column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 60, Rohani teaches directing communication to a sector from the determined sectors with the highest processed signal value when at least two of the determined sectors have equal highest assigned credits (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 61, Rohani teaches directing communication to a sector from the determined sectors with the highest forward link quality metric when at least two of the determined sectors have equal highest assigned credits (see Abstract, column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 62, Rohani teaches directing communication to a sector with the highest assigned credits if no sector has the assigned credits greater than the second threshold (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 63, Rohani teaches directing communication to a sector with the highest assigned credits and the highest processed signal value when at least two

sectors have equal highest assigned credits (see Abstract, column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 64, Rohani teaches directing communication to a sector with the highest assigned credits and the highest forward link quality metric when at least two sectors have equal highest assigned credits (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 68, Rohani teaches the processor is configured to determine at the subscriber station a quality metric of a forward link for each sector in the subscriber station's list by executing a set of instructions to measure a signal-to-noise-and-interference-ratio of the forward link (see Abstract and column 1, lines 45-49, Rohani inherently teaches this claimed limitation since Rohani teaches measuring a signal strength of forward and reverse links).

Regarding claims 69, Rohani teaches the processor is configured to measure a signal-to-noise-and-interference-ratio of the forward link by executing a set of instructions to measure a signal-to-noise-and-interference-ratio of a pilot signal on the forward link (see Abstract and column 1, lines 45-49, Rohani inherently teaches this claimed limitation since Rohani teaches measuring a signal strength of forward and reverse links).

Regarding claim 70, Rohani teaches the processor is configured to measure a signal-to-noise-and-interference-ratio of a pilot signal on the forward link by executing a set of instructions to measure a signal-to-noise-and-interference-ratio of a non-continuous pilot signal on the forward link (see Abstract and column 1, lines 45-49,

Rohani inherently teaches this claimed limitation since Rohani teaches measuring a signal strength of forward and reverse links).

Regarding claims 71 and 72, Rohani teaches ascertain at the subscriber station a first signal value at a position in a first channel of the forward link for the at least one sector in the subscriber station's list, process at the subscriber station the ascertained first signal value for the at least one sector in the subscriber station's list, and determine at the subscriber station the forward link de-rating value in accordance with the processed first signal value for the at least one sector in the subscriber station's list insufficient (see column 4, lines 30-34, line 61 to column 5, line 23 and Abstract).

Regarding claims 74 and 75, Rohani teaches determine at the subscriber station the forward link de-rating value in accordance with a pre-determined relationship between the processed first signal value and the forward link de-rating value (see column 2, lines 46-50, column 4, lines 7-10, column 5, lines 1-23 and Abstract).

Regarding claim 77, Rohani teaches determine sectors with the assigned credits greater than a second threshold, and direct communication to a sector from the determined sectors with the highest of the assigned credits if a time interval elapsed from the last re-direction of communication (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 78, Rohani teaches the processor is configured to direct communication between the subscriber station and one sat*n sector from the sectors in the subscriber station's list in accordance with the assigned credits by executing a set of instructions to: determine sectors with the assigned credits greater than a second

threshold; and direct communication to a sector from the determined sectors with the highest of the assigned credits if a time interval elapsed from the last re-direction of communication (see Abstract, column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 79, Rohani teaches the set of instructions executable by the processor to further comprises a set of instructions to direct communication to a sector from the determined sectors with the highest processed signal value when at least two of the determined sectors have equal highest assigned credits (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 80, Rohani teaches the set of instructions executable by the processor to further comprises a set of instructions to direct communication to a sector from the determined sectors with the highest forward link quality metric when at least two of the determined sectors have equal highest assigned credits (see Abstract, column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 81, Rohani teaches the set of instructions executable by the processor to further comprises a set of instructions to: ascertain sectors with the assigned credits greater than a third threshold; and direct communication to a sector from the ascertained sectors with the highest of the assigned credits if a time interval failed to elapse from the last re-pointing (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 82, Rohani teaches the set of instructions executable by the processor to further comprises a set of instructions to direct communication to a sector from the determined sectors with the highest processed signal value when at least two

of the determined sectors have equal highest assigned credits (see Abstract, column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 83, Rohani teaches the set of instructions executable by the processor to further comprises a set of instructions to direct communication to a sector from the determined sectors with the highest forward link quality metric when at least two of the determined sectors have equal highest assigned credits (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 85, Rohani teaches the set of instructions executable by the processor further comprises a set of instructions to: determine a second reverse link quality metric of a current serving sector in the subscriber station's list, and wherein the directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with the determined forward links quality metrics and the determined forward link de-rating value (see column 3, lines 1-22) comprises: direct communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with the determined forward links quality metrics, the determined second reverse link quality metric, and the determined forward link de-rating value (see column 3, lines 1-22, column 4, lines 21-41 and Abstract).

Regarding claim 86, Rohani teaches the processor is configured to determine a second reverse link quality metric of a current serving sector in the subscriber station's list by executing a set of instructions to: ascertain a second signal value in a second channel of the forward link of the current serving sector in the subscriber station's list,

and determine the second reverse link quality metric in accordance with the ascertained second signal value for the current serving sector in the subscriber station's list (see column 3, lines 1-22, column 4, lines 21-41 and Abstract).

Regarding claim 91, Rohani teaches determine sectors with the assigned credits greater than a second threshold, and direct communication to a sector from the determined sectors with the highest of the assigned credits if a time interval elapsed from the last re-direction of communication (see column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 92, Rohani teaches determine sectors with the assigned credits greater than a second threshold, and direct communication to a sector from the determined sectors with the highest of the assigned credits if the determined second reverse link quality metric is insufficient (see Abstract, column 4, lines 30-34 and line 61 to column 5, line 23).

Regarding claim 93, Rohani teaches the processor is configured to direct communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with the assigned credits and the determined second reverse link quality metric by executing a set of instructions to: determine sectors with the assigned credits greater than a second threshold; and direct communication to a sector from the determined sectors with the highest of the assigned credits if the determined second reverse link quality metric is insufficient (see column 3, lines 1-22 and column 4, lines 30-34 and column 4, line 61 to column 5, line 23).

Regarding claim 94, Rohani teaches the set of instructions executable by the

processor to further comprises a set of instructions to direct communication to a sector from the determined sectors with the highest processed signal value when at least two of the determined sectors have equal highest assigned credits (see Abstract, column 4, lines 30-34 and column 4, line 61 to column 5, line 23).

Regarding claim 95, Rohani teaches the set of instructions executable by the processor to further comprises a set of instructions to direct communication to a sector from the determined sectors with the highest forward link quality metric when at least two of the determined sectors have equal highest assigned credits (see column 4, lines 30-34 and column 4, line 61 to column 5, line 23).

Regarding claim 96, Rohani teaches the set of instructions executable by the processor to further comprises a set of instructions to direct communication to a sector with the highest assigned credits if no sector has the assigned credits greater than the second threshold (see column 3, lines 1-22, column 4, lines 30-34 and column 4, line 61 to column 5, line 23).

Regarding claim 97, Rohani teaches the set of instructions executable by the processor to further comprises a set of instructions to direct communication to a sector with the highest assigned credits and the highest processed signal value when at least two sectors have equal highest assigned credits (see Abstract, column 4, lines 30-34 and column 4, line 61 to column 5, line 23).

Regarding claim 98, Rohani teaches the set of instructions executable by the processor to further comprises a set of instructions to direct communication to a sector with the highest assigned credits and the highest forward link quality metric when at

least two sectors have equal highest assigned credits (see column 3, lines 1-22, column 4, lines 30-34 and column 4, line 61 to column 5, line 23).

4. Claim 8, 23, 39 and 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohani (US 5,999,522) in view of Dufour (US 5,613,205) and further in view of Miya et al (US 6,480,479).

Regarding claims 8, 23, 39 and 73, the combination of Rohani and Dufour teaches the method as claimed in claims 1, 16, 32 and 66. The combination of Rohani and Dufour does not specifically disclose processing at the subscriber station the ascertained first signal value for the at least one sector in the subscriber station's list comprises filtering the ascertained signal value by a filter with a pre-determined time constant.

Miya teaches processing at the subscriber station the ascertained first signal value for the at least one sector in the subscriber station's list comprises filtering the ascertained signal value by a filter with a pre-determined time constant (see column 2, lines 19-28).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Miya into the system of Rohani and Dufour in order to determine the phase of inverse spread code with a spread code in the correlation circuit of the communication channel (see Miya, column 2, lines 25-28).

5. Claim 53 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohani (US 5,999,522) in view of Dufour (US 5,613,205) and further in view of Bose (US 4,477,809).

Regarding claims 53 and 87, the combination of Rohani and Dufour teaches claims 1 and 66. The combination of Rohani and Dufour teaches does not specifically disclose ascertaining a second signal value in a second channel of the forward link of the current serving sector in the subscriber station's list comprises ascertaining a DRC lock bit in a DRC channel of the forward link for the current serving sector in the subscriber station's list.

Bose teaches ascertaining a second signal value in a second channel of the forward link of the current serving sector in the subscriber station's list comprises ascertaining a DRC lock bit in a DRC channel of the forward link for the current serving sector in the subscriber station's list (see column 3, lines 49-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Bose into the system of Rohani and Dufour in order to provide a method for random-access frequency data communication between a central controller and each of a plurality of remote sites (see Bose, column 1, lines 7-10).

6. Claim 54, 55, 88 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohani (US 5,999,522) in view of Dufour (US 5,613,205) and further in view of Chien et al (US 6,389,474).

Regarding claims 54, 55, 88 and 89, the combination of Rohani and Dufour teaches measuring at each sector a reverse link quality metric (see column 3, lines 1-22 and Abstract). The combination of Rohani and Dufour teaches does not specifically disclose processing the reverse link quality metric to provide an indicator, providing the indicator on a forward link.

Chien teaches processing the reverse link quality metric to provide an indicator, providing the indicator on a forward link (see column 4, lines 38-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Chien into the system of Rohani in order to provide a method and apparatus by which multiple users can coordinate their use of a shared communication medium (see Chien, column 1, lines 10-14).

Allowable Subject Matter

7. Claims 10-15, 25 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 10-15, 25 and 26 are objected for the reasons as stated in the previous Office action dated 02/24/05 (pages 21-22).

Response to Arguments

8. Applicant's arguments with respect to claims 1-9, 16-24 and 27-98 have been considered but are moot in view of the new ground(s) of rejection.

On pages 26 of applicant's remarks, applicant argues that neither of Rohani and Dufour, alone or in combination, teaches claims 1, 16 and 31.

In response, Rohani teaches a method for directing communication between a subscriber station and a plurality of sectors in a data communication system (see fig.2), comprising: determining a forward link quality metric for each sector in the subscriber station's list (column 2, lines 56-61, see "determining"), determining a quality related to a reverse link quality metric for each sector in the subscriber station's list (column 5, lines 35-44, see "determining"), and directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with the determined forward link quality metrics and the determined qualities related to a reverse link quality metric (see column 4, lines 21-41 and Abstract),

Dufour teaches determining at the subscriber station a forward link quality metric for each sector in the subscriber station's list (see column 6, lines 12-28), determining at the subscriber station a quality related to a reverse link quality metric for each sector in the subscriber station's list (also see column 6, lines 12-28), and combination of Rohani and Dufour does indeed teach applicant's claims 1, 16 and 31. In addition, applicant's attention is directed to the rejection of claims 1, 16 and 31 above.

On pages 26 of applicant's remarks, applicant further argues that neither of Rohani and Dufour, alone or in combination, teaches claims 32, 65 and 66.

In response, Rohani teaches a method for directing communication between a subscriber station and a plurality of sectors in a data communication system (see fig.1), comprising: determining a forward link quality metric for each sector in the subscriber

station's list (column 2, lines 56-61 and column 5, lines 35-44, see "determining"), determining a forward link de-rating value for at least one sector in the subscriber station's list (see column 2, lines 56-61 or Abstract), assigning credits to each sector in the subscriber station's list except the sector currently serving the subscriber station in accordance with the forward link quality metric and the forward link de-rating value (column 4, lines 31-34, see "candidate list", the teaching of Rohani indeed teaches Applicant's "assigning credits" and "de-rating"), and directing communication between the subscriber station and one sector from the sectors in the subscriber station's list in accordance with the determined forward links quality metrics and the at least one determined forward link de-rating value (see column 3, lines 1-22 or Abstract),

Dufour teaches determining at the subscriber station a forward link quality metric for each sector in the subscriber station's list (see column 6, lines 12-28) and combination of Rohani and Dufour does indeed teach applicant's claims 32, 65 and 66. In addition, applicant's attention is directed to the rejection of claims 32, 65 and 66 above.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi H. Ly

03/16/06

Marsha D Banks-Harold

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